

AMENDMENTS

In the Claims

The following is a marked-up version of the claims with the language that is underlined ("____") being added and the language that contains strikethrough ("—") being deleted:

1. (Currently Amended) A method ~~comprising the steps of:~~ comprising:
 - (A) receiving an email message from a simple mail transfer protocol (SMTP) server, the email message comprising:
 - (A1) a 32-bit string indicative of the length of the email message;
 - (A2) a text body;
 - (A3) an SMTP email address;
 - (A4) a domain name corresponding to the SMTP email address;
 - (A5) an attachment;
 - (B) tokenizing the text body to generate tokens representative of words in the text;
 - (C) tokenizing the SMTP email address to generate a token representative of the SMTP email address;
 - (D) tokenizing the domain name to generate a token that is representative domain name;
 - (E) tokenizing the attachment to generate a token that is representative of the attachment, ~~the tokenizing step comprising the steps of:~~ wherein tokenizing comprises:
 - (E1) generating a 128-bit MD5 hash of the attachment;
 - (E2) appending the 32-bit string to the generated MD5 hash to produce a 160-bit number, and
 - (E3) UUencoding the 160-bit number to generate the token representative of the attachment;
 - (F) determining a probability value for each of the generated tokens;
 - (G) selecting a predefined number of interesting tokens, the interesting tokens being the

generated tokens having the greatest non-neutral probability values;

(H) performing a Bayesian analysis on the selected interesting tokens to generate a spam probability; and

(I) categorizing the email message as a function of the generated spam probability.

2 – 5. (Canceled)

6. (Currently Amended) A method ~~comprising the steps of: comprising;~~ receiving an email message comprising a text body, an SMTP email address, ~~an attachment,~~ and a domain name corresponding to the SMTP email address; tokenizing the SMTP email address to generate a token representative of the SMTP email address; ~~tokenizing the attachment to generate a token that is representative of the attachment;~~ tokenizing the domain name to generate a token representative of the domain name; and determining a spam probability from the generated tokens.

7 – 10. (Canceled)

11. (Currently Amended) The method of claim 6, wherein ~~the step of~~ determining the spam probability ~~comprises the steps of:~~ comprises:

assigning a spam probability value to the token representative of the SMTP email address;

assigning a spam probability value to the token representative of the domain name; and generating a Bayesian probability value using the spam probability values assigned to the tokens.

12. (Currently Amended) The method of claim 11, wherein the step of determining the spam probability further ~~comprises the steps of:~~ comprises:

comparing the generated Bayesian probability value with a predefined threshold value.

13. (Currently Amended) The method of claim 12, wherein the step of determining the spam probability further ~~comprises the steps of:~~ comprises:

categorizing the email message as spam in response to the Bayesian probability value being greater than the predefined threshold.

14. (Currently Amended) The method of claim 12, wherein the step of determining the spam probability further ~~comprises the step of:~~ comprises:

categorizing the email message as non-spam in response to the Bayesian probability value being not greater than the predefined threshold.

15. (Canceled)

16. (Currently Amended) The method of ~~claim 15, claim 6,~~ wherein the step of receiving the email message further ~~comprises the step of:~~ comprises:

receiving an email message including a text body.

17. (Currently Amended) The method of claim 16, further ~~comprising the step of:~~ comprising:

tokenizing the words in the text body to generate tokens representative of the words in the text body.

18. (Canceled)

19. (Currently Amended) The method of claim 17, wherein ~~the step of determining~~ the spam probability ~~comprises the steps of:~~ comprises:

assigning a spam probability value to each of the tokens representative of the words in the text body;

assigning a spam probability value to the token representative of the attachment; and generating a Bayesian probability value using the spam probability values assigned to the tokens.

20. (Currently Amended) The method of claim 19, wherein ~~the step of determining~~ the spam probability further ~~comprises the steps of:~~ comprises:

comparing the generated Bayesian probability value with a predefined threshold value.

21. (Currently Amended) The method of claim 20, wherein ~~the step of determining~~ the spam probability further ~~comprises the steps of:~~ comprises:

categorizing the email message as spam in response to the Bayesian probability value being greater than the predefined threshold.

22. (Currently Amended) The method of claim 20, wherein ~~the step of determining~~ the spam probability further ~~comprises the steps of:~~ comprises:

categorizing the email message as non-spam in response to the Bayesian probability value being not greater than the predefined threshold.

23. (Currently Amended) A system comprising:

email receive logic configured to receive an email message comprising an SMTP email

address and address, a domain name corresponding to the SMTP email address; address, and an attachment;

tokenize logic configured to tokenize the SMTP email address to generate a token representative of the SMTP email address;

tokenize logic configured to tokenize the attachment to generate a token that is representative of the attachment;

tokenize logic configured to tokenize the domain name to generate a token representative of the domain name; and

analysis logic configured to determine a spam probability from the generated tokens.

24. (Currently Amended) A system comprising:

means for receiving an email message comprising an SMTP email address and address, a domain name corresponding to the SMTP email address; address, and an attachment;

means for tokenizing the SMTP email address to generate a token representative of the SMTP email address;

means for tokenizing the attachment to generate a token that is representative of the attachment;

means for tokenizing the domain name to generate a token representative of the domain name; and

means for determining a spam probability from the generated tokens.

25. (Currently Amended) A computer-readable medium comprising:

computer-readable code adapted to instruct a programmable device to receive an email message comprising an SMTP email address and address, a domain name corresponding to the SMTP email address; address, and an attachment;

computer-readable code adapted to instruct a programmable device to tokenize the

SMTP email address to generate a token representative of the SMTP email address;
computer-readable code adapted to instruct a programmable device to tokenize the attachment to generate a token that is representative of the attachment;
computer-readable code adapted to instruct a programmable device to tokenize the domain name to generate a token representative of the domain name; and
computer-readable code adapted to instruct a programmable device to determine a spam probability from the generated tokens.

26. (Original) The computer-readable medium of claim 25, further comprising:
computer-readable code adapted to instruct a programmable device to assign a spam probability value to the token representative of the SMTP email address;
computer-readable code adapted to instruct a programmable device to assign a spam probability value to the token representative of the domain name; and
computer-readable code adapted to instruct a programmable device to generate a Bayesian probability value using the spam probability values assigned to the tokens.

27. (Original) The computer-readable medium of claim 26, further comprising:
computer-readable code adapted to instruct a programmable device to compare the generated Bayesian probability value with a predefined threshold value.

28. (Original) The computer-readable medium of claim 27, further comprising:
computer-readable code adapted to instruct a programmable device to categorize the email message as spam in response to the Bayesian probability value being greater than the predefined threshold.

29. (Original) The computer-readable medium of claim 27, further comprising:

computer-readable code adapted to instruct a programmable device to categorize the email message as non-spam in response to the Bayesian probability value being not greater than the predefined threshold.

30. (Currently Amended) A system comprising:
email receive logic configured to receive an email message comprising an attachment;
tokenize logic configured to tokenize the entire attachment to generate a token representative of the attachment; and
analysis logic configured to determine a spam probability from the generated token.

31. (Original) A system comprising:
means for receiving an email message comprising an attachment;
means for tokenizing the attachment to generate a token representative of the attachment; and
means for determining a spam probability from the generated token.

32. (Currently Amended) A computer-readable medium comprising:
computer-readable code adapted to instruct a programmable device to receive an email message comprising an attachment;
computer-readable code adapted to instruct a programmable device to tokenize the entire attachment to generate a token representative of the attachment; and
computer-readable code adapted to instruct a programmable device to determine a spam probability from the generated token.

33. (Original) The computer-readable medium of claim 32, further comprising:
computer-readable code adapted to instruct a programmable device to receive an email

message having a text body.

34. (Original) The computer-readable medium of claim 33, further comprising:
computer-readable code adapted to instruct a programmable device to tokenize the
words in the text body to generate tokens representative of the words in the text body.

35. (Original) The computer-readable medium of claim 34, further comprising:
computer-readable code adapted to instruct a programmable device to assign a spam
probability value to each of the tokens representative of the words in the text body;
computer-readable code adapted to instruct a programmable device to assign a spam
probability value to the token representative of the attachment; and
computer-readable code adapted to instruct a programmable device to generate a
Bayesian probability value using the spam probability values assigned to the tokens.

36. (Original) The computer-readable medium of claim 35, further comprising:
computer-readable code adapted to instruct a programmable device to compare the
generated Bayesian probability value with a predefined threshold value.

37. (Original) The computer-readable medium of claim 36, further comprising:
computer-readable code adapted to instruct a programmable device to categorize the
email message as spam in response to the Bayesian probability value being greater than the
predefined threshold.

38. (Original) The computer-readable medium of claim 36, further comprising:
computer-readable code adapted to instruct a programmable device to categorize the
email message as non-spam in response to the Bayesian probability value being not greater
than the predefined threshold.